AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) In a nanochannel substance in which wherein an oxide layer contains a surfactant micelle, comprising a nanochannel structure containing a functional molecule, wherein a the functional molecule is contained in the nanochannel, and an inner wall of the nanochannel is hydrophobic.

Claim 2. (Currently Amended) The nanochannel structure substance containing a functional molecule according to claim 1, wherein the oxide layer mainly comprises silicon oxide.

Claim 3. (Currently Amended) The nanochannel structure substance containing a functional molecule according to claim 1, wherein the functional molecule is a chelate molecule.

Claim 4. (Cancelled)

Claim 5. (Currently Amended) The nanochannel structure substance containing a functional molecule according to claim [[4]] 1, wherein the nanochannel substance contains an agent for making the nanochannel hydrophobic.

Claim 6. (Currently Amended) The nanochannel structure substance containing a functional molecule according to claim [[5]] 2, wherein the nanochannel substance in which the oxide layer mainly comprises silicon oxide contains a silane coupling agent.

Claim 7. (Currently Amended) A nanochannel thin film containing a functional molecule wherein thea nanochannel structure is arranged in a form of a thin film on a solid substrate.

Claim 8. (Currently Amended) The nanochannel thin film containing a nanochannel structure containing a functional molecule according to claim 7, wherein the nanochannel is sedimented in manymultiple layers on a solid substrate in a three-dimensional manner.

Claim 9. (Currently Amended) A method for the manufacture of a nanochannel structure substance containing a functional molecule, wherein comprising:

forming a nanochannel substance, where wherein an oxide layer contains a surfactant micelle, is formed from an acidic aqueous solution of alcohol containing a surfactant, a hydrophobically treating agent, and an alkoxide compound which is able to form an oxide,

and then <u>impregnating</u> a functional molecule is <u>impregnated</u> in the nanochannel substance.

Claim 10. (Cancelled)

Claim 11. (Currently Amended) The method for the manufacture of a nanochannel structure substance containing a functional molecule according to claim 109, wherein heating or drying is conducted on a solid substrate to form a nanochannel substance on its surface, and then impregnating a functional molecule is impregnated in the nanochannel substance.